

No. 1 Workshop, M-10, Middle section, Science & Technology Park,

Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053 Report No.: SZEM180400296003

Fax: +86 (0) 755 2671 0594 Page: 1 of 11

TEST REPORT

Application No.: SZEM1804002960CR

Applicant: Winners'Sun Plastic & Elactronic (Shenzhen)Co., Ltd

Address of Applicant: Zone E, Ying Tai Industrial Park, Dalang, Longhua Town, Ban An District,

Shenzhen, Guang Dong Province, China

Manufacturer: Winners'Sun Plastic & Elactronic (Shenzhen)Co., Ltd

Address of Manufacturer: Zone E, Ying Tai Industrial Park, Dalang, Longhua Town, Ban An District,

Shenzhen, Guang Dong Province, China

Factory: Winners'Sun Plastic & Elactronic (Shenzhen)Co., Ltd

Address of Factory: Zone E, Ying Tai Industrial Park, Dalang, Longhua Town, Ban An District,

Shenzhen, Guang Dong Province, China

Equipment Under Test (EUT):

EUT Name: Tripod Selfie Stick

Model No.: WS-SQB641, WS-SQB645B, WS-SQB650B, WS-18002, WS-17001, WS-

17002 -

Please refer to section 2 of this report which indicates which model was

actually tested and which were electrically identical.

Trade mark: Dispho

Standard(s): 47 CFR Part 15, Subpart C

 Date of Receipt:
 2018-04-18

 Date of Test:
 2018-05-11

 Date of Issue:
 2018-05-11

Test Result: Pass*

^{*} In the configuration tested, the EUT complied with the standards specified above.



EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document dhereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



Report No.: SZEM180400296003

Page: 2 of 11

	Revision Record								
Version	Version Chapter Date Modifier								
01		2018-05-11		Original					

Authorized for issue by:		
	Peter. Gong	
	Peter Geng /Project Engineer	-
	EvicFu	
	Eric Fu /Reviewer	-



Report No.: SZEM180400296003

Page: 3 of 11

2 Test Summary

Emission Part							
Item	Standard	Method	Requirement	Result			
Radiated Emissions (30MHz-1GHz)	47 CFR Part 15, Subpart C	ANSI C63.10:2013	Class B	Pass			

Remark:

Model No.: WS-SQB641, WS-SQB645B, WS-SQB650B, WS-18002, WS-17001, WS-17002

Only the model WS-SQB641 was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, with only difference on model name and appearance.



Report No.: SZEM180400296003

Page: 4 of 11

3 Contents

			Page
1	CO/	VER PAGE	1
2	TES	ST SUMMARY	3
3			
3	COr	NTENTS	4
4	GEN	NERAL INFORMATION	5
	4.1	DETAILS OF E.U.T.	5
	4.2	DESCRIPTION OF SUPPORT UNITS	5
	4.3	MEASUREMENT UNCERTAINTY	
	4.4	TEST LOCATION	6
	4.5	TEST FACILITY	
	4.6	DEVIATION FROM STANDARDS	
	4.7	ABNORMALITIES FROM STANDARD CONDITIONS	6
5	EQl	JIPMENT LIST	7
6	EMI	SSION TEST RESULTS	8
	6.1	RADIATED EMISSIONS (30MHz-1GHz)	8
	6.1.	1 E.U.T. Operation	
		2 Test Setup Diagram	
	6.1.3	3 Measurement Data	8
7	PHC	DTOGRAPHS	11
	7.1	RADIATED EMISSIONS (30MHz-1GHz) TEST SETUP	11
		10.50.015 Emission (Osivii iz 10112) 1501 Octor	



Report No.: SZEM180400296003

Page: 5 of 11

4 General Information

4.1 Details of E.U.T.

Frequency Range: 2402MHz to 2480MHz

Bluetooth Version: V3.0

Modulation Type: GFSK

Number of Channels: 79

Sample Type: Portable production
Antenna Type: Built-in antenna

Antenna Gain: 2.3dBi

Power supply: Rechargeable battery:DC 3.7V 0.24Wh(Charge by USB)

4.2 Description of Support Units

The EUT has been tested as an independent unit.

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.25 x 10 ⁻⁸
2	Duty cycle	0.37%
3	Occupied Bandwidth	3%
4	RF conducted power	0.75dB
5	RF power density	2.84dB
6	Conducted Spurious emissions	0.75dB
7	DE Dadiated news	4.5dB (below 1GHz)
/	RF Radiated power	4.8dB (above 1GHz)
8	Dedicted Couriers emission test	4.5dB (Below 1GHz)
8	Radiated Spurious emission test	4.8dB (Above 1GHz)
9	Temperature test	1 ℃
10	Humidity test	3%
11	Supply voltages	1.5%
12	Time	3%



Report No.: SZEM180400296003

Page: 6 of 11

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC

Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

VCCI

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• FCC -Designation Number: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

Industry Canada (IC)

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



Report No.: SZEM180400296003

Page: 7 of 11

5 Equipment List

Radiated Emissions (30MHz-1GHz)							
Equipment	Manufacturer Model No Inventory			Cal Date	Cal Due Date		
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2017-08-05	2020-08-04		
Measurement Software	AUDIX	e3 V8.2014-6- 27	N/A	N/A	N/A		
Coaxial Cable	SGS	N/A	SEM025-01	2017-07-13	2018-07-12		
EMI Test Receiver	Agilent Technologies	N9038A	SEM004-05	2017-09-27	2018-09-26		
BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEM003-01	2017-06-27	2020-06-26		
Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEM005-01	2018-04-02	2019-04-01		

General used equipment							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2017-09-29	2018-09-28		
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2017-09-29	2018-09-28		
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2017-09-29	2018-09-28		
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2018-04-08	2019-04-07		



Report No.: SZEM180400296003

Page: 8 of 11

6 Emission Test Results

6.1 Radiated Emissions (30MHz-1GHz)

Test Requirement: 47 CFR Part 15, Subpart C

Test Method: ANSI C63.10:2013 Frequency Range: 30MHz to 1GHz

Measurement Distance: 3m

Limit:

30 MHz - 88 MHz $40.0 (\text{dB}\mu\text{V/m})$ quasi-peak 88 MHz - 216 MHz $43.5 (\text{dB}\mu\text{V/m})$ quasi-peak 216 MHz - 960 MHz $46.0 (\text{dB}\mu\text{V/m})$ quasi-peak 960 MHz - 1000 MHz $54.0 (\text{dB}\mu\text{V/m})$ quasi-peak

Detector: Peak for pre-scan (120kHz resolution bandwidth) 30M to1000MHz

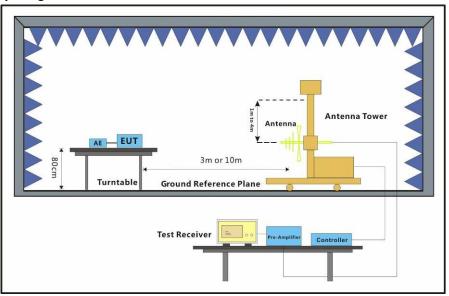
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 23.6 °C Humidity: 54 % RH Atmospheric Pressure: 1020 mbar

Test mode a:Charge+Tx

6.1.2 Test Setup Diagram



6.1.3 Measurement Data

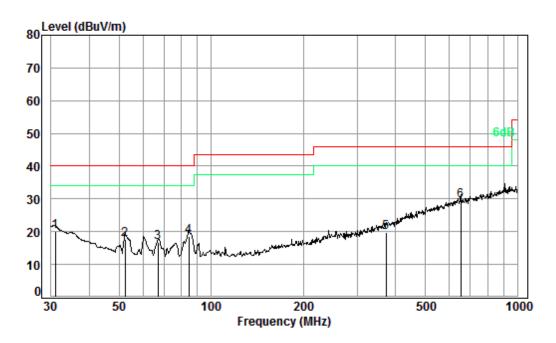
An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.



Report No.: SZEM180400296003

Page: 9 of 11

Mode:a; Polarization:Horizontal



Condition: 3m HORIZONTAL

Job No. : 02960CR

Test mode: a

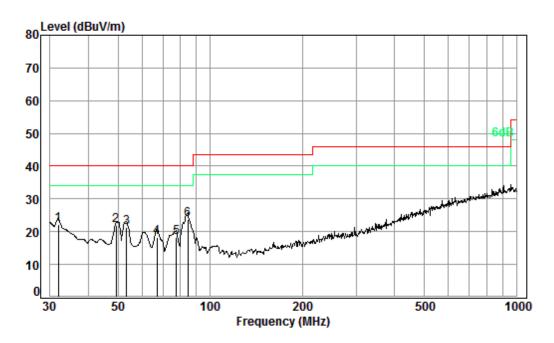
	Freq			Preamp Factor				Over Limit
-	MHz	dB		dB				——dB
1		0.60				-		
1 2	30.96 52.39	0.60 0.80		27.67 27.59				-19.93 -22.29
3	66.97	0.80		27.54				-23.22
4	84.41	1.10	12.50	27.50	32.50	18.60	40.00	-21.40
5	372.00	2.12	21.69	27.68	23.77	19.90	46.00	-26.10
6 pp	651.94	2.81	27.30	27.62	26.91	29.40	46.00	-16.60



Report No.: SZEM180400296003

Page: 10 of 11

Mode:a; Polarization:Vertical



Condition: 3m VERTICAL Job No. : 02960CR

Test mode: a

	Freq			Preamp Factor				Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	31.95	0.60	21.40	27.66	27.85	22.19	40.00	-17.81
2	49.36	0.79	14.39	27.60	34.35	21.93	40.00	-18.07
3	53.32	0.80	13.85	27.59	34.11	21.17	40.00	-18.83
4	66.97	0.80	12.91	27.54	31.96	18.13	40.00	-21.87
5	77.59	1.03	12.18	27.51	32.57	18.27	40.00	-21.73
6 pp	84.41	1.10	12.50	27.50	37.74	23.84	40.00	-16.16



Report No.: SZEM180400296003

Page: 11 of 11

7 Photographs

7.1 Radiated Emissions (30MHz-1GHz) Test Setup



- End of the Report -